APPENDIX A

MANAGEMENT TOOLS FOR RECONNAISSANCE AND SURVEILLANCE OPERATIONS

This appendix contains the following checklists, formats, and reports used in planning and supervising R&S missions. NOTE: This appendix can be reproduced and used in the field as a pocket guide.

o Figure A-1. Example of an intelligence estimate in matrix format.

o Figure A-2. R&S tasking matrix.

o Figure A-3. Different versions of the R&S tasking matrix.

o Figure A-4. R&S checklist.

NOTE: The purpose of the R&S checklist is to make sure complete coordination is conducted for all R&S operations.

o Figure A-5. Collection plan format.

o Figure A-6. IEW Asset redeployment matrix.

o Figure A-7. Reconnaissance asset utilization matrix.

o Figure A-8. A patrol plan.

o Figure A-9. Patrol report format.

o Figure A-10. Hints on debriefing patrols.

o Figure A-11. GSR or REMBASS plan format.

o Figure A-12. GSR or REMBASS briefing checklist.

o Figure A-13. Standard collection asset request format (SCARF) basic format.

o Figure A-14. Mission report format.

AS OF CURRENT INTELLIGENCE ESTIMATE

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1. Weather: For period from ______________ to ______________.

BMNT from ________ to ________. EENT from _______ to __________.

Sunrise _______. Sunset _______. Temp from _______ to _______.

Winds: Speed from ________ to ________ knots. Direction_______.

Night operations: Skies cloudy clear. % of moon illum ______.

Trafficability: Poor good excellent.

Precipitation: Snow rain sleet hail.

Maximum precipitation per month _______ inches.

Average precipitation per month _______ inches.

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2. Terrain: From__________ to __________.

Observation and fields of fire:

Concealment and cover:

Obstacles:

Key terrain

Decisive terrain:

Other key terrain:

Avenues of approach:

Other:

Figure A-1. Example of intelligence estimate in matrix format.

3. Enemy in brigade sector

Map sheets:

Intelligence overlay:

Committed forces:

Reinforcements:

Recent activities:

Strengths:

Weaknesses:

Enemy frontline trace:

Second line of defense:

Probable courses of action:

Enemy NBC: Possible Probable Imminent

Next ____________ hours.

Figure A-1. Example of intelligence estimate in matrix format (continued).

DTG: ____________

MISSION: ____________

(CLASSIFICATION)

PRIORITY (matches PIR no)	NAI (grid)	START STOP	SIR	A	B	C	D	E and AT				COORDINATION	REPORTS

(CLASSIFICATION)

NOTE: A maneuver battalion S2 or S3 tasking subordinate units would change SIR to SOR. S2s use this matrix to coordinate and manage the R&S effort.

Figure A-2. R&S tasking matrix.

BRIGADE R&S TASKING MATRIX

UNIT / TASKING	PRIORITY	NAI	LOCATION	REPORTING REQUIREMENT / EVENT OR INDICATOR	REMARKS

BRIGADE OR BATTALION R&S TASKING MATRIX

PRIORITY	NAI	LOCATION	REPORTING REQUIREMENT / EVENT OR INDICATOR	COLLECTION UNIT OR ASSETS										REMARKS

Figure A-3. Different versions of the R&S tasking matrix.

I. Planning Process.

A. Initial Requirements:

1. Did higher headquarters provide tasking requirements?

2. Was the commander's PIR and IR stated and included?

3. Did the commander provide R&S intent?

4. Did the S2 brief the staff on enemy collection capabilities?

5. Were other staff tasks performed?

B. SIR Developed (IPB Driven):

1. Did S2 identify air or ground AAs?

2. Do situation and event templates reflect probable or prioritized enemy COAs?

3. Was NAI developed in detail? (What is expected? When? Where?)

4. Were collectable indicators at NAI developed?

5. Were SIR developed from NAI and indicators?

6. Were reporting requirements developed for priority collection missions to allow the commander time to change plan?

C. Possible Collectors Analyzed:

1. Did S2 coordinate with staff, S2, and G2 to identify all available collection assets?

2. Did S2 analyze asset capabilities to develop collection requirements based on range to target, time available, target characteristics, terrain, weather, enemy (obscurants use), and communication?

3. Did S2 analyze collection redundancy (is it necessary)?

Figure A-4. R&S checklist.

4. Did staff identify support requirements (communication nets, retransmission, fire support, logistic support, special equipment support)?

5. Did S2 identify gaps in collection?

6. Did S2 backbrief S3 or the commander on R&S concept?

7. Were warning orders sent to appropriate assets?

8. What were timelines?

a. When was mission received?

b. What is NLT for execution?

c. When was templating done?

d. When was tentative plan made? Backbriefed?

e. When were warning orders issued?

f. When was initial reporting needed?

g. Who was in charge of R&S planning?

h. Who was in charge of CR planning?

II. Preparation for R&S Operations.

A. Specific Collection Instructions:

1. What assets were available? Used?

a. Scouts.

b. GSR.

c. Patrols.

d. OPs/LPs.

e. FOs.

f. Infantry.

Figure A-4. R&S checklist (continued).

g. Armor.

h. AT.

i. Aviation.

j. Engineer.

k. Signal.

l. Cavalry.

m. EW.

n. MP.

o. Other.

2. Did the S2 provide detailed instructions to tasked assets? Did the instructions include--

a. Who is tasked?

b. What to look for?

c. Why to look?

d. When to look?

e. Where to look?

f. What you could expect to see?

g. How to get there?

h. Who to coordinate with?

i. Passage of lines and recognition signals?

j. Reporting requirements?

k. Friendly assets in AO?

l. Resupply?

m. Obstacles?

Figure A-4. R&S checklist (continued).

n. MEDEVAC?

o. NBC hazards?

3. Was the collection location appropriate (concealment, collectable)?

4. Were there sufficient control measures included to control assets during mission?

5. Did the S2 request assistance from higher headquarters for identified collection gaps?

6. Did the R&S plan cover all collection requirements?

7. Were assets overtasked?

8. Was redundancy appropriate for this mission?

B. Coordination:

1. What is format of plan (collection plan, overlay, matrix.)?

2. Were direct or indirect fires or jamming coordinated between staff and S2?

3. Was a CI vulnerability assessment made?

4. Was additional equipment (special) planned for?

5. Were communication nets established to meet reporting needs?

6. Were commanders and staff briefed on plan before execution?

7. Did commander or S3 approve final plan?

8. Did assets know specific requirements (PIR and IR)?

9. Was plan disseminated to all involved or those with a need to know (FRAGO, overlay)?

10. Was plan sent to higher headquarters?

Figure A-4. R&S checklist (continued).

C. Asset Internal Coordination:

1. Was equipment checked?

2. Were internal procedures clarified?

3. Did coordination between assets occur?

4. Was mission rehearsed?

5. Was plan developed far enough in advance for assets to prepare or rehearse?

6. Was plan developed in time for higher headquarters to review?

III. Execution.

A. Continuity of R&S and CR Operations:

1. Did unit plan provide for operations when scout or other R&S assets are inoperable?

2. Did unit SOP provide for operations during briefings, debriefings, or rehearsals?

3. Are units and leaders cross trained to facilitate substitutions or replacement of scouts?

B. Asset and Unit Response:

1. Did assets depart and set up on time?

2. Did assets use concealment, cover, and camouflage?

3. Were assets able to observe enemy undetected?

4. Was low-level deception used?

5. What were meteorological report requirements?

6. Were enemy locations pinpointed?

7. Was objective reconnoitered?

Figure A-4. R&S checklist (continued).

8. Were obstacles identified and marked?

9. Were routes marked?

10. Was enemy reconnaissance located?

11. Were CR missions performed?

12. Did assets help with C2 during attack?

13. Did assets help direct or control fires?

14. Was terrain reconnoitered? (Trafficability reported?)

C. Reporting:

1. Were reports timely, accurate, and concise?

2. Were assets debriefed?

D. Results:

1. Did S2 plot asset reports (track results of plan)?

2. Did S2 identify inadequately tasked or unproductive assets and change tasking (with approval of commander or S3)?

3. Did reports or analysis answer PIR and IR?

4. Was R&S plan updated and recoordinated?

5. Were templates updated?

E. Dissemination:

1. Was commander briefed on answer to PIR?

2. Has commander updated PIR?

3. Did units get intelligence based on priority?

4. Did higher headquarters get answers to taskings?

5. Did assets receive feedback on level of success?

Figure A-4. R&S checklist (continued).

CLASSIFICATION

UNIT:

COLLECTION PLAN

PERIOD COVERED: FROM ________ TO________

PRIORITY INTELLIGENCE REQUIREMENTS AND INFORMATION REQUIREMENTS	INDICATIONS (ANAYLSIS OF INTELLIGENCE REQUIREMENTS)	AVENUE OF APPROACH					COORDINATES FM TQ 5720 TO UQ 9273	AGENCIES TO BE EMPLOYED														HOUR AND DESTINATION OF REPORTS	REMARKS
		MOBILITY CORRIDOR NO					FM TO																
		NAMED AREA OF INTEREST	DISTANCE	TIME NET	TIME NLT	SPECIFIC ORDERS OR REQUEST	OBSERVED TIME	SOC J2	GP MI DET	1 BN MI DET	ODA 934	ODA 932	ODA 931	ODB 930	4th POG	96th CA	HN Police	HN 1st BDE	HN 2d BDE				
						Report increased border crossing VIC TQ6020, TQ3218 and TQ0613																As obtained	As needed
						Report discovery of caches containing newly introduced weapons.																	
						Report insurgent changes in recruitment.																	
		AVENUE OF APPROACH					COORDINATES FM TO	AGENCIES TO BE EMPLOYED															
		MOBILITY CORRIDOR NO					FM TQ 5901 TO TQ 8220															Briefly state specific information to be sought that will substantiate each indication. Specific information needs become the basis for orders and requests to collect information. (List all available units that can be employed in the collection of required information.) Place an "X" under each unit that can acquire the specific information sought. Circle the "X" under the unit actually selected that will be assigned collection action.	
		NAMED AREA OF INTEREST	DISTANCE	TIME NET	TIME NLT	SPECIFIC ORDERS OR REQUEST	OBSERVED TIME																
		NAI																					
		NAI																					
		NAI																					

CLASSIFICATION

NOTE: Normally used at division and above, however, it can be modified for use at the brigade or battalion.

Figure A-5. Collection plan format.

ASSET	POSITION 1	POSITION 2	POSITION 3	REMARKS
				• FINAL CROSSING SITES(S). • OPCON OR ATTACHMENT. • FINAL OBJ COORDINATION. • CHALLENGE AND PASSWORD. • PHASE LINE TIMING.

Note: This matrix is filled in by the IEWSE officer. Other staff officers refer to this to find out where the assets are deployed or where they will deploy.

Figure A-6. Redeployment matrix for IEW assets.

SQUADRON or BATTALION: ______________________________

Date: ____________

A check indicates asset named was employed in the listed task.

	Tasks	NAI	Scout	GSR	Visual Aids	FO	Infantry	Armor	Aviation	Engineer	Signal and EW
Objective	Locate enemy positions										
	Locate objective obstacles										
	Breach or mark obstacles										
	Establish objective OP										
	Direct fires										
	Assist C^2										
Route	Locate screen										
	Locate route obstacles										
	Breach or mark obstacles										
	Mark assault route										
	Mark Infiltration route										
	Establish route OP										
	Perform terrain reconnaissance										
	Determine trafficability										
	Provide timely communications										
Other	Reconnoiter beyond objective										
	Establish screen										

NOTE: Taken from the Rand study. Can be used as a tool to ensure all available assets are used in R&S operations.

Figure A-7. Reconnaissance asset utilization matrix.

1. Patrol number.
2. Task organization and effective time.
3. Mission (PIR and IR included).
4. Start time.
5. Completion time.
6. Action upon enemy contact.
7. Action at obstacles.
8. Location of friendly minefields and barriers.
9. Routes.
10. SP, RP, passage points, and checkpoints.
11. Fire support.
12. Organization and communication frequency for reporting.
13. Actions upon completion of mission.
14. Special instructions.

Figure A-8. Patrol plan.

Patrol reports are prepared by the S2 section based on information reported by the patrol during debriefing. All pertinent information is included in the report to ensure completeness. The report is then disseminated in accordance with appropriate SOP.

(DESIGNATION OF PATROL)
TO: ______________
MAPS: ____________

A. Size and composition of patrol.
B. Mission.
C. Time of departure.
D. Time of return.
E. Routes out and back.
F. Terrain: (Description of the terrain: dry, swampy, jungle, thickly wooded, high brush, rocky; deepness of ravines and draws; condition of bridges as to type, size, and strength; effect on armor and wheeled vehicles.)
G. Enemy: (Strength, disposition, condition of defense, equipment, weapons, attitude, morale, exact location, movements, and any shift in disposition; time activity was observed; coordinates where activity occurred.)
H. Any map corrections.
I. (Not used.)
J. Miscellaneous information (including aspects of NBC warfare).
K. Results of encounters with enemy: (Enemy prisoners and disposition, identifications, enemy casualties, captured documents, and equipment.)
L. Condition of patrol (including disposition of any dead or wounded).
M. Conclusions and recommendations (include to what extent the task was accomplished and recommendations as to patrol equipment and tactics).

Signature	Rank	Unit of Patrol Leader

N. Additional remarks by interrogator.

Signature	Rank	Unit of Interrogator	Time

O. Distribution.

Figure A-9. Patrol report format.

1. Make the subject comfortable.

2. Debrief orally.

3. Debrief as soon as possible.

4. Do not ask leading questions.

5. Make sure PIR and IR are given to the patrol before it goes out.

6. Was intelligence accurate? If not, what were the inaccuracies?

7. Was the map accurate? If not, what were the inaccuracies?

8. If aerial photos were used, was the imagery analysis accurate?

9. What was the condition of trails? Did the trails show signs of recent use?

10. Were rivers or streams crossed or followed?

11. What were stream and river conditions.

12. Give location of the following and were they in recent use?

   o Bridges, by type.

   o Fords.

   o Roads, trails.

13. Local contacts:

   o Name of village, city, or town.

   o Number, location.

   o Were they friendly? Indifferent? Hostile?

   o Was there any previous government contact?

   o Have they moved recently? If so, why?

   o Did they give any information?

Figure A-10. Hints on debriefing patrols.

14. Enemy contacts:

- o Where and when.
- o Number, race, and sex?
- o How were they dressed?
- o Were they carrying packs? How were they armed?
- o Activity? If moving, in what direction?
- o Any equipment or documents recovered?
- o Casualties (own and enemy)?
- o Enemy casualties identified? Disposition of bodies?
- o Any prisoners or crossovers?
- o Any observed (detected) ground or airborne R&S or other intelligence collection activity?

15. Camps:

- o Where, when, and how was camp discovered?
- o How sited? How many huts or buildings?
- o What type? How long ago were they built?
- o In use? Food dumps?
- o Defenses constructed? Approach and escape routes?
- o Weapons, ammunition, or tools?
- o Signs of radios having been used?
- o Electricity? Generators? Used batteries?
- o Documents?
- o Printing press? Copiers? Used carbon paper?
- o What was done with the camp?

Figure A-10. Hints on debriefing patrols (continued).

16. Cultivated areas:

- o Time, date, location of discovery?
- o Size and shape?
- o Was camouflage attempted?
- o What crops?
- o How old? Signs of harvesting?
- o When last tended?
- o Signs of habitation? Tools? Machinery?
- o Trails in area?
- o What was done to the cultivation?

Figure A-10. Hints on debriefing patrols (continued).

1. Mission.

2. Time required to be operational.

3. Routes to GSR site or REMBASS emplacement areas.

4. Location of primary or alternate and subsequent GSR sites and REMBASS strings and fields.

5. Left and right scan limits of GSRs in mils; point target location.

6. Withdrawal routes to subsequent GSR sites.

7. Location of friendly minefields and barriers.

8. Action upon enemy contact.

9. Passage points and checkpoints.

10. Fire support planning.

11. Organization and communication frequency for reporting.

12. Special instructions.

Figure A-11. GSR or REMBASS plan format.

1. Friendly and enemy situation.
2. Mission.
3. Maps, photos, overlays.
4. Expected targets (type).
5. Required reports.
6. Reporting procedures.
7. Communications.
8. Security.
9. Food service.
10. Maintenance support.
11. Sensor emplacement sites.
12. Monitoring sites.
13. Mission security implant.
14. Proposed radar site locations.
15. Surveillance sectors.
16. Operation periods and schedules.
17. MEDEVAC.
18. Passage of lines.

Figure A-12. GSR or REMBASS briefing checklist.

STANDARD COLLECTION ASSET REQUEST FORMAT

Asset managers use the standard collection asset request format (SCARF) for intelligence requirements tasking and for requesting information from higher or adjacent headquarters. At corps and division, intelligence requirements tasking is directed toward MI commanders and commanders of other elements of the combat force capable of collecting the information.

Intelligence requirements tasking provides the selected unit with a specific requirement, but not with specific instructions for carrying out the mission. The SCARF tells you--

o What information is needed.

o Where to look for the movers, shooters, sitters, and emitters.

o When to look.

o When the information is needed.

o What to look with (in some cases).

A. Requester number.

B. Originator priority.

C. Activity or target type (area emitter and size [point, areas, or unit]).

D. BE number, ELINT notation or case.

E. Location (if known or last known).

F. Duration:

- o Start date-time.
- o Frequency.
- o Stop date-time.
- o Latest acceptable date-time for information utility.

G. Location accuracy:

- o Required.
- o Acceptable.

H. PIR and IR desired.

I. Justification.

J. Remarks (include disciplines and collectors recommended).

Figure A-13. SCARF basic format.

JOINT TACTICAL AIR RECONNAISSANCE AND SURVEILLANCE REQUEST FORM (DD Form 1975)

This form is used to request a joint tactical air reconnaissance or surveillance mission. The form states requirements, identifies needs, and, occasionally, specifies the actual air asset to perform the mission.

Any echelon initiates the request. It is used for both immediate and preplanned mission requirements. The requestor completes section 1 of the request for each specific mission. Normally, these requests are transmitted by electrical means. The headquarters receiving the request adds information required to validate or complete the request. Obtain DD Form 1975 through your S1.

MISSION REPORT

Air units include strike or attack, reconnaissance or surveillance, airlift, observation, and helicopter. Air units use the mission report to report the results of all missions and significant sightings along the route of the flight.

The mission report amplifies the inflight report and is normally submitted within 30 minutes after aircraft landing to--

o The tasking agency.

o The requesting unit or agency.

o Other interested organizations.

When the EW air task or mission is completed, intelligence personnel conduct a briefing and submit a mission report.

HEADING

PRECEDENCE

ORIGINATING AGENCY

ACTION ADDRESSEES

INFORMATION ADDRESSEES

SECURITY CLASSIFICATION/CODE

MISSION REPORT (Number) DATE-TIME GROUP

BODY

1. AIR TASK/MISSION NUMBER OR NICKNAME. Reference the request number, FRAGO number, or directive causing initiation of the mission.

2. LOCATION IDENTIFIER. Target number, line number, approved target designator/identifier, or coordinates of the target or sighting being reported.

3. TIME ON TARGET/TIME OF SIGHTING. Report all times by date-time group, using ZULU time unless otherwise directed.

4. RESULTS/SIGHTING INFORMATION. This item should contain the pilot and aircrew evaluation of expected results (for example, percent destroyed, number and type destroyed, or percent of coverage). It should contain concise narrative information on significant sightings (for example, unusual or new enemy equipment or concentrations of enemy forces observed to include number, speed, and direction [if applicable]).

5. REMARKS. Includes information not specifically mentioned in above items (for example, enemy defenses encountered; weather data; hostile meaconing, intrusion, jamming, and interference attempts).

Figure A-14. Mission report format.